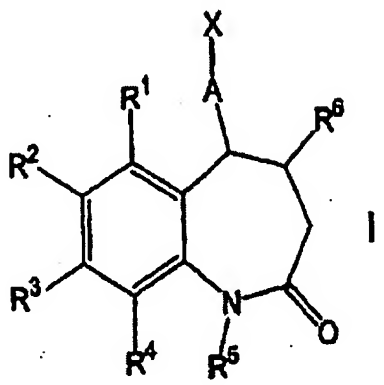
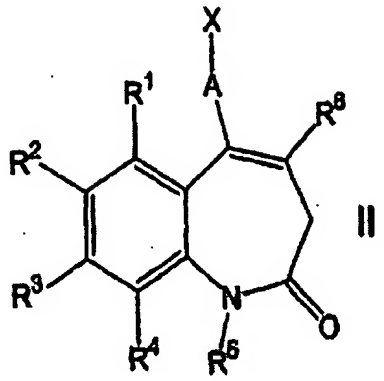
III. CLAIM AMENDMENTS

1. (Original) substituted benzo[b]azepin-2-one compounds of the general formulae I and II and in each case the tautomers thereof,



I



II

in which

R', R^2, R^3 and R^4, identical or different, denote a linear or branched, saturated or unsaturated aliphatic C_{1-10} residue or a saturated or unsaturated cycloaliphatic C_{3-7} residue, wherein each of the above-stated residues may optionally be joined together via an ether bridge, or hydrogen, a halogen or a hydroxy group,

R^5 denotes hydrogen, a linear or branched, saturated or unsaturated aliphatic C_{-10} residue, an aryl or a heteroaryl residue,

R^6 denotes hydrogen or a residue of the formula $-CH_2-NR^7_2$, wherein the two residues are identical or different and have the meaning stated below or may form a 3-8-membered ring

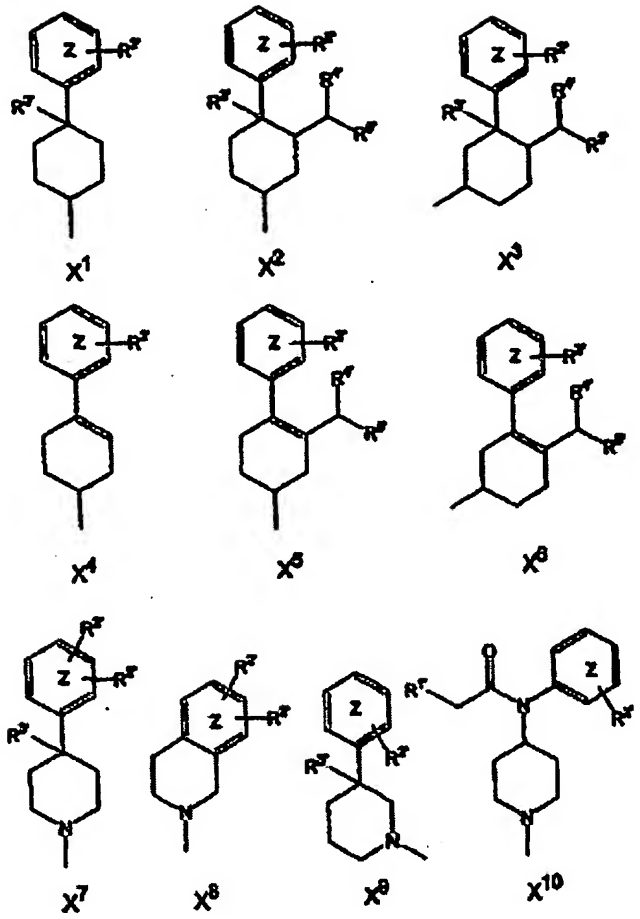
together with the nitrogen atom connecting them as a ring member,

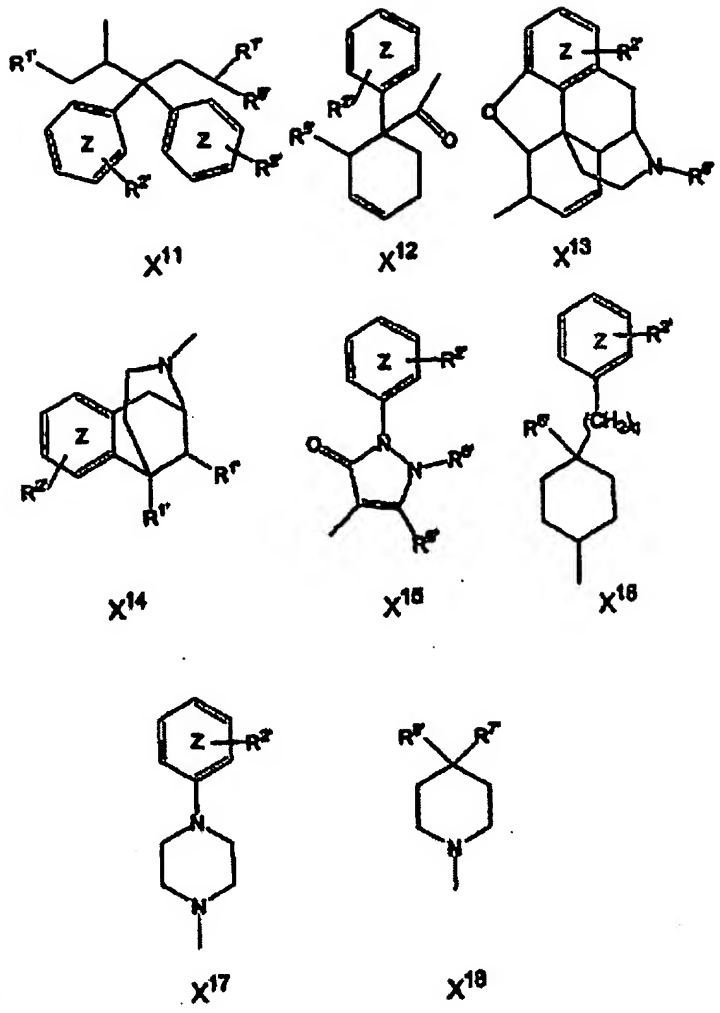
R^7 denotes a linear or branched, saturated or unsaturated aliphatic C_{1-6} residue or a saturated or unsaturated cycloaliphatic C_{3-6} residue,

A denotes a bridge with one of the following formulae:

$-(CH_2)_{n+2}-$, $-(CH_2)_n-CH=CH-$, $-(CH_2)_nCOO-$, $-(CH_2)_nCONH-$, $-(CH_2)n+1^0(CH_2)_pCO-$, $-(CH_2)_{n+1}\ ^0-$, $-(CH_2)_{n+1}\ NR^{1\prime}-$ in which n denotes 0, 1, 2, or 3, and p denotes 0 or 1, R″ has the meaning stated hereinafter and the bond to the residue X is always stated last and wherein bonding of the residues X^{17} and X^{18} is possible only via the three bridges stated first,

and X denotes one of the following residues of the general formulae X^1 to X^{18}, in which the unoccupied bond line symbolises the bond to the bridge A and





in which

$R^{1'}$ denotes hydrogen, a linear or branched, saturated or unsaturated aliphatic C_{1-10} residue, a saturated or unsaturated cycloaliphatic C_{3-7} residue, an aryl or heteroaryl residue,

$R^{2'}$ denotes a linear or branched, saturated or unsaturated aliphatic C_{1-10} residue, a saturated or unsaturated cycloaliphatic C^{3-7} residue or an aryl or

heteroaryl residue wherein all above-stated residues may optionally be joined via an ether, thioether or SO^2 bridge, or hydrogen, a halogen, a hydroxy, thiol, cyano or nitro group or a group of the formula $-NR1'^2$ wherein the two residues $R^{1'}$ are identical or different and have the above-stated meaning,

$R^{3'}$ denotes a linear or branched, saturated or unsaturated aliphatiC C_{1-10} residue, a saturated or unsaturated cycloaliphatic C_{3-7} residue, an aryl or heteroaryl residue, wherein all the above-stated residues may optionally be joined via an ether or an ester bridge, hydrogen, a halogen, a hydroxy group,

$R^{4'}$ denotes hydrogen, an aryl or heteroaryl residue, wherein the aryl or heteroarYl residue may comprise at least one substituent $R^{2'}$ with the above meaning, with the exception of hydrogen,

$R^{5'}$ denotes a residue of the formula $-NR^6_2$, wherein the two residues $R^{6'}$ may be identical or different and have the meaning stated hereinafter or may form a 3-7-membered ring together with the nitrogen atom connecting them as a ring member, which ring may optionally contain at least one oxygen and/or at least one further nitrogen as a ring atom, wherein the nitrogen may comprise a substituent $R^{10'}$ with the meaning stated hereinafter,

$R^{6'}$ denotes a linear or branched, saturated or unsaturated aliphatic c_{1-6} residue, a saturated or unsaturated or

cycloaliphatic C_{3-7} residue, an aryl or heteroaryl residue,

$R^{7'}$ denotes a cyano, amide or carboxylic acid residue,

$R^{8'}$ denotes a residue of the formula $-NR^{9'}_2$, wherein the two residues $R^{9'}$ may be identical or different and have the meaning stated hereinafter or may form a 3-7-membered ring together with the nitrogen atom connecting them as a ring member, which ring may optionally contain at least one oxygen and/or at least one further nitrogen as a ring atom,

$R^{9'}$ denotes hydrogen, a linear or branched aliphatic C_{1-10} residue,

$R^{10'}$ denotes hydrogen, a linear or branched, saturated or unsaturated aliphatic C_{1-10} residue, an aryl or heteroaryl residue and

Z denotes at least one optionally present oxygen, sulfur or nitrogen as a ring atom,

and q denotes 0, 1, 2 or 3,

optionally in the form of the racemates thereof, the pure stereoisomers thereof, in particular enantiomers or diastereomers, or in the form of mixtures of the stereoisomers, in particular the enantiomers or diastereomers, in any desired mixing ratio or in each case in the form of the acids or bases thereof or in

the form of the salts thereof, in particular physiologically acceptable salts, or in the form of the solvates thereof, in particular hydrates.

2. (Original) Substituted benzo[b]azepin-2-one compounds and in each case the tautomers thereof according to claim 1, characterised in that R^2 and R^3, identical or different, denote a linear or branched, saturated or unsaturated aliphatic c^{1-3} residue or a halogen and R^1 and R_4 in each case denote hydrogen, R^5 denotes hydrogen or a linear or branched, saturated or unsaturated aliphatic c_{1-3} residue and R^6 denotes hydrogen or a residue of the formula $-CH_2-NR^7_2$, in which R^7 denotes a linear or branched, saturated or unsaturated aliphatic C_{1-3} residue, optionally in the form of the racemates thereof, the pure stereoisomerS thereof, in particular enantiomers or diastereomers, or in the form of mixtures of the stereoisomers, in particular the enantiomers or diastereomers, in any desired mixing ratio or in each case in the form of the acids or bases thereof or in the form of the salts thereof, in particular physiologically acceptable salts, or in the form of the solvates thereof, in particular hydrates.

3. (Original) Substituted benzo[b]azepin-2-one compounds and in each case the tautomers thereof according to claim 1, characterised in that R^2 and R^3 in each case denote a methyl group or a chlorine and R^1 and R^4 in each case denote hydrogen, R^5 denotes hydrogen or a methyl group and R^6 denotes hydrogen or a residue of the formula - $CH_2-N(CH_3)_2$, optionally in the form of the racemates thereof, the pure stereoisomers thereof, in particular enantiomers or diastereomers, or in the form of

mixtures of the stereoisomers, in particular enantiomers or diastereomers, in any desired mixing ratio or in each case in the form of the acids or bases thereof or in the form of the salts thereof, in particular physiologically acceptable salts, or in the form of the solvates thereof, in particular hydrates.

4. (Original) Substituted benzo[b]azepin-2-one compounds and in each case the tautomers thereof according to claim 1, characterised in that R^3 denotes a linear or branched, saturated or unsaturated aliphatic C_{1-3} residue or a halogen and R^1, R^2 and R^4 in each case denote hydrogen, R^5 denotes hydrogen or a linear or branched, saturated or unsaturated aliphatic c_{1-3} residue and R^6 denotes hydrogen or a residue of the formula $-CH_2-N(R^7)2$, in which R^7 denotes a linear or branched, saturated or unsaturated aliphatic c_{1-3} residue, optionally in the form of the racemates thereof, the pure stereoisomers thereof, in particular enantiomers or diastereomers, or in the form of mixtures of the stereoisomers, in particular the enantiomers or diastereomers, in any desired mixing ratio or in each case in the form of the acids or bases thereof or in the form of the salts thereof, in particular physiologically acceptable salts, or in the form of the solvates thereof, in particular hydrates.

5. (Original) Substituted benzo[b]azepin-2-one compounds and in each case the tautomers thereof according to claim 1, characterised in that R^3 denotes a methyl group or a chlorine and R', R^2 and R^4 in each case denote hydrogen, R^5 denotes hydrogen or a methyl group and R^6 denotes hydrogen or a residue of the formula $-CH_2-N(CH_3)_2$, optionally in the form of the

racemates thereof, the pure stereoisomers thereof, in particular enantiomers or diastereomers, or in the form of mixtures of the stereoisomers, in particular enantiomers or diastereomers, in any desired mixing ratio or in each case in the form of the acids or bases thereof or in the form of the salts thereof, in particular physiologically acceptable salts, or in the form of the solvates thereof, in particular hydrates.

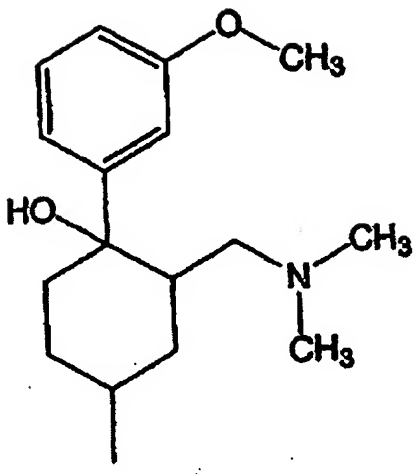
6. (Original) Substituted benzo[b]azepin-2-one compounds and in each case the tautomers thereof according to claim 1, characterised in that R^1 and R^3, identical or different, denote a linear or branched, saturated or unsaturated aliphatic c_{1-3} residue or a halogen and R^2 and R^4 in each case denote hydrogen, R^5 denotes hydrogen or a linear or branched, saturated or unsaturated aliphatic c_{1-3} residue and R^6 denotes hydrogen or a residue of the formula $-CH_2-NR^72$, in which R^7 denotes a linear or branched, saturated or is unsaturated aliphatic c_{1-3} residue, optionally in the form of the racemates thereof, the pure stereoisomers thereof, in particular enantiomers or diastereomers, or in the form of mixtures of the stereoisomers, in particular the enantiomers or diastereomers, in any desired mixing ratio or in each case in the form of the acids or bases thereof or in the form of the salts thereof, in particular physiologically acceptable salts, or in the form of the solvates thereof, in particular hydrates.

7. (Original) Substituted benzo[b]azepin-2-one compounds and in each case the tautomers thereof according to claim 1,characterised in that R^1 and R^3 in each case denote a methyl group or a chlorine and R^2 and R^4 in each case denote hydrogen, R^5 denotes hydrogen or a methyl group and R^6 denotes hydrogen or

a residue of the formula $-CH_2-N(CH_3)2$, optionally in the form of the racemates thereof, the pure stereoisomers thereof, in particular enantiomers or diastereomers, or in the form of mixtures of the stereoisomers, in particular enantiomers or diastereomers, in any desired mixing ratio or in each case in the form of the acids or bases thereof or in the form of the salts thereof, in particular physiologically acceptable salts, or in the form of the solvates thereof, in particular hydrates.

8. (Currently Amended) Substituted benzo[b]azepin-2-one compounds and in each case the tautomers thereof according to ~~one of claims 1-7~~ claim 1, characterised in that A denotes a bridge of the formula $-CH_2-COO-$ or $-CH_2CONH-$ optionally in form of the racemates thereof, the pure stereoisomers thereof, in particular enantiomers or diastereomers, or in the form of mixtures of the stereoisomers, in particular the enantiomers or diastereomers, in any desired mixing ratio or in each case in the form of the acids or bases thereof or in the form of the salts thereof, in particular physiologically acceptable salts, or in the form of the solvates thereof, in particular hydrates.

9. (Currently Amended) Substituted benzo[b]azepin-2-one compounds and in each case the tautomers thereof according ~~to one of claims 1-8~~ claim 1, characterised in that X denotes a residue of the following formula:



optionally in the form of the racemates thereof, the pure stereoisomers thereof, in particular enantiomers or diastereomers, or in the form of mixtures of the stereoisomers, in particular the enantiomers or diastereomers, in any desired mixing ratio or in each case in the form of the acids or bases thereof or in the form of the salts thereof, in particular physiologically acceptable salts, or in the form of the solvates thereof, in particular hydrates.

10. (Original) Substituted benzo[b]azepin-2-one compounds and the tautomers thereof according to claim 1:

2'-(8-Chloro-2-oxo-2,3-dihydro-iH-benzo[b]azepin-5-yl)acetic acid [3"-(N,N-dimethylaminomethyl)-4"-hydroxy-4"-(m-methoxyphenyl)cyclohexyl] ester,

2'-(8-Chloro-1-methyl-2-oxo-2,3-dihydro-1H-benzo[b]azepin-5-yl) acetic acid [3"-(N,N-dimethylaminomethyl)-4"-hydroxy-4"-(m-methoxyphenyl)cyclohexyl] ester,

2'-(8-Chloro-2-oxo-2,3-dihydro-1H-benzo[b]azepin-5-yl)-N-[3"-N,N-dimethylaminomethyl)-4"-hydroxy-4"-(m-methoxyphenyl)cyclohexyl]acetamide,

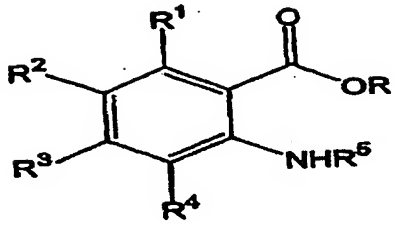
2'-(8-Chloro-1methyl-2-oxo-2,3-dihydro-1H-benzo[b]azepin-5-yl)-N-[3"-(N,N-dimethylaminomethyl)-4"-hydroxy-4"-(m-methoxyphenyl)cyclohexyl]acetamide

optionally in the form of the racemates thereof, the pure stereoisomers thereof, in particular enantiomers or diastereomers, or in the form of mixtures of the stereoisomers, in particular the enantiomers or diastereomers, in any desired mixing ratio or in each case in the form of the acids or bases thereof or in the form of the salts thereof, in particular physiologically acceptable salts, or in the form of the solvates thereof, in particular hydrates.

11. (Currently Amended) A process for the production of substituted benzo[b]azepin-2-one compounds, the tautomers and corresponding stereoisomers thereof according to ~~one of claims 1-10~~ claim 1, characterised in that

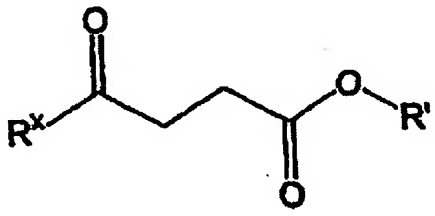
A) an optionally substituted 2-aminobenzoic alkyl ester of the general formula (1), in which R^1, 25 R^2, R^3, R^4 and R^5 have the same meaning as in one of claims 1-7 and R denotes an

alkyl group, preferably a methyl or ethyl group,



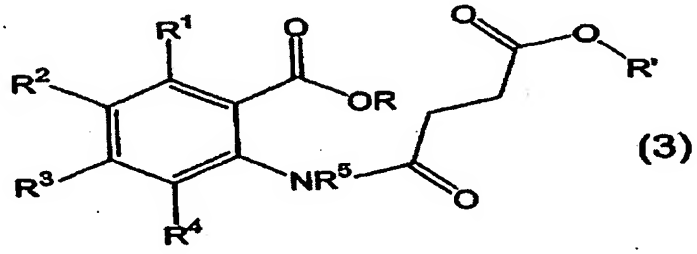
(1)

is reacted with succinic acid dialkyl ester of the general formula (2), in which R′ denotes an alkyl group, preferably a methyl or ethyl group and Rx denotes chlorine or an alkoxy group, preferably a methoxy or ethoxy group,



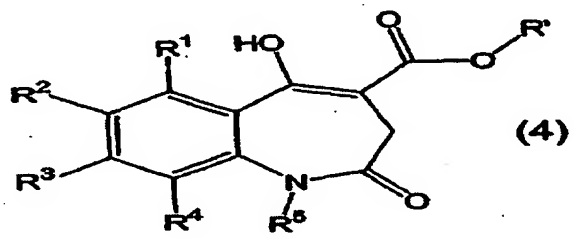
(2)

under suitable reaction conditions, in a suitable solvent, preferably pyridine, and is then worked up, optionally followed by purification of the optionally substituted N- (2-carbalkoxyphenyl)succinic acid alkyl ester amide formed of the general formula (3), in which R, R′, R^1 R^2, R^3, R^4 and ^{5} have the above-stated meaning



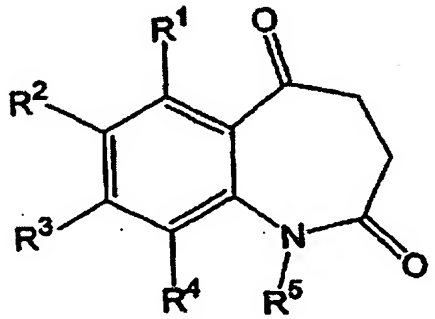
(3)

B) an optionally substituted N-(2-carboalkoxyphenyl)succinic acid alkyl ester amide of the general formula (3) is reacted in the presence of potassium tert-butanolate in a suitable solvent and then worked up, optionally followed by purification of the optionally substituted 5-hydroxy-2-oxo-2,3-dihydro-1H-benzo[b]azepin-4-carboxlic acid alkyl ester formed of the general formula (4), in which R', R^1, R^2, R^3, R^4 and R^5 have the above-stated meaning,



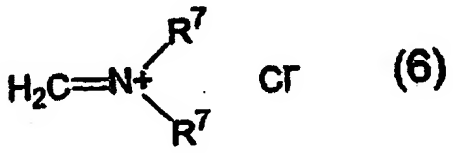
(4)

C) an optionally substituted 5-hydroxy-2-oxo-2,3-dihydro-1H-benzo[b]azepin-4-carboxylic acid alkyl ester of the general formula (4) is reacted in a dimethyl sulfoxide/Water mixture at elevated temperature and then worked up, optionally followed by purification of the optionally substituted 2,3,4,5-tetrahydro-1H-benzo[b]azepin-2,5-dione of the general formula (5), in which R', R^2, R^3 R^4 and ^{5} have the above-stated meaning,



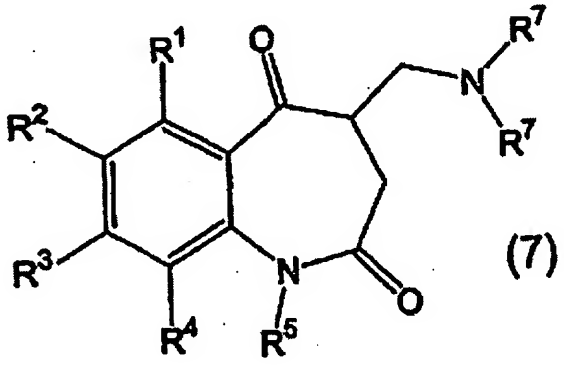
(5)

D) an optionally substituted 2,3,4,5-tetrahydro-1H-benzo[b]azepin-2,5-dione of the general formula (5) is reacted with a substituted aminomethyle hydrochloride of the general formula (6), in which the residue R^7 has the meaning stated in claim 1,



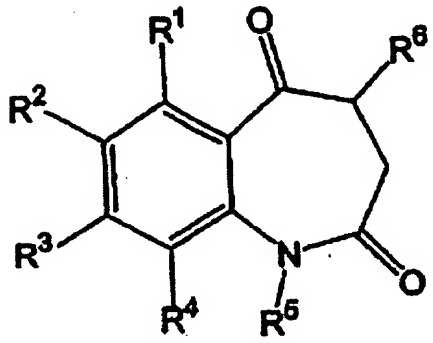
(6)

in the presence of an acid, preferably acetyl chloride, in a suitable solvent, preferably acetoflitrile, and then worked up, optionally followed by purification of the optionally substituted aminomethyl-2,3,4,5-tetrahydro-1H-benzo[b]azepin-2,5-dione of the general formula (7), in which R^1, R^2, R^3, R^4, R^5 and R^7 have the above-stated meaning,



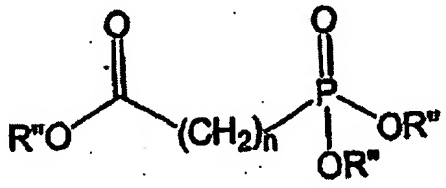
(7)

E) an optionally substituted 2,3,4,5-tetrahydro-1H-benzo[b]azepin-2,5-dione of the general formula (8), in which R', R^2, R^3, R^4, R^5 and R^6 have the same meaning as in one of claims 1-7 and which combines the compounds of the general formulae (5) and (7)



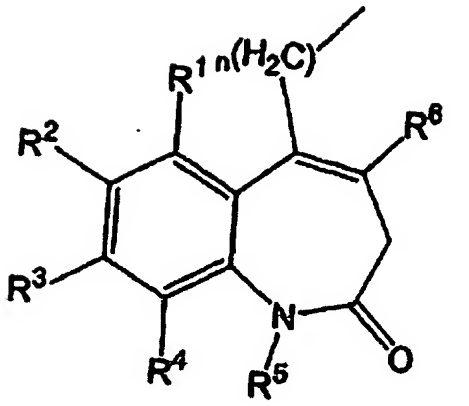
(8)

is reacted with a phosphonoalkanoic acid trialkyl ester of the general formula (9), in which n has the same meaning as in claim 1 and R" denotes an alkyl group, preferably a methyl or ethyl group,



(9)

in the presence of a base, preferably potassium tert-butanolate, in a suitable solvent, preferably dimethylformamide and then worked up, optionally followed by Purification of the compound formed of the formula Y-COOR" in which R" has the above stated meaning and Y denotes a residue of the general formula Y, in which the unoccupied bond line symbolises the bond to the residue -COOR" and



Y

in which R', R^2, R^3, R^4, R^5, R^6 and n have the above-stated meaning.

F) optionally an ester of the formula Y-COOR" is reacted in the presence of a base, Preferably sodium or potassium hydroxide, in a suitable solvent, Preferably an alcohol/water mixture, and then worked up, optionally followed by Purification of the carboxylic acid formed of the formula Y-COOH in which Y has the above-stated meaning,

G) optionally a carboxylic acid of the formula Y COOH or a carboxylic acid ester of the formula Y COOR" in which Y and R" have the above stated meaning, is derivatised in that

a) a carboxylic acid or carboxylic acid ester of the formula Y-COOH or Y-CQQ" is reduced with the assistance of reducing agents, preferably lithium aluminium hydride, in a suitable solvent, Preferably tetrahydrofuran, to the corresponding alcohol of the formula Y-CH_2-OH,

b) a carboxylic acid or carboxylic acid ester of the formula Y-COOH or Y-COOR" is reduced with the assistance of reducing agents, preferably diisobutylaluminium hydride, in a suitable solvent, preferably hexane, to the corresponding aldehyde of the formula Y-CHO

or

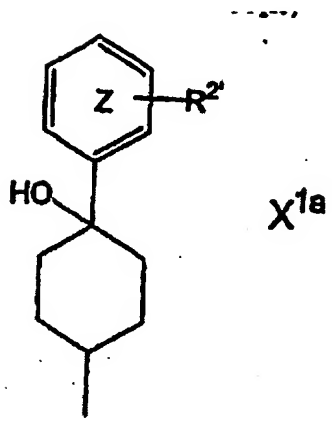
c) an alcohol of the formula Y-CH_2-OH according to a) is reacted with a brominating agent, Preferably PBr_3 or Ph_3PBr_2 to yield the corresponding bromide of the formula Y-CH_2-Br

and then worked up and the product is Optionally purified,

H) a compound of the formula X^1-R^{IV}, in which X^1 has the above-stated meaning and R^{IV} denotes a functional group, is Optionally produced in that

a) 1,4-cyclohexanedione monoethylene ketal, 4-oxocyclohexan-1-one ethylene ketal or 4-oxocyclohexane carboxylic acid is reacted with magnesium and a brominated or chlorinated, Optionally Substituted aromatic or heteroaromatic compound in a suitable solvent, Preferably dry diethyl ether, at elevated temperature to yield the corresponding coupling product and then the ketal is optionally cleaved by reaction with hydrochloric acid in a suitable solvent, Preferably tetrahydrofuran and worked up, optionally followed by purification of the product of the formula x^{1a}=o, X^{1a}-NHR^1

or X^{1a}-CO_2H, in which X^{1a} denotes a residue of the formula X^{1a} and R1', $R^{2'}$ and Z have the above-stated meaning and the unoccupied bond line symbolises the bond to the residue =0, -$NHR^{1'}$ or -CO_2H,



b) Optionally a ketone of the formula X^{1a}=O is reacted in the presence of a suitable reducing agent, Preferably sodium borohydride in a suitable solvent, Preferably methanol, to yield the corresponding alcohol of the formula X^{1a}-oH, worked UP and the product is Optionally purified,

c) Optionally a ketone of the formula X^{1a}=0 is reacted under nitrogen in a suitable solvent, preferably tetrahydrofuran, firstly with ammonium trifluoroacetate and then with glacial acetic acid and sodium triacetoxy borohydride, to yield the corresponding amine of the formula X^{1a}-NH_2, worked up and the product is optionally purified,

d) optionally a carboxylic acid of the formula X^{1a}=CO_2H is activated by reaction with dicyclohexylcarbodiimide or by

conversion into the carboxylic acid chloride or a mixed anhydride, reacted with diazomethane in a suitable solvent, preferably ether, and then treated with water, worked up and the product of the formula $X^{2'}$-CO-CH_2-OH is optionally purified,

e) optionally the hydroxy group in position 4 of the cyclohexane ring in the residue X^{1a}
is converted into hydrogen, a halogen, an ether, ester, alkyl, aryl or heteroaryl group, in that

α) in order to introduce an ether group, a compound from one of steps a) -d) is reacted with an aliphatic or cycloaliphatic compound in the presence of a suitable catalyst in a suitable solvent, preferably in the presence of sodium hydride in dimethylformamide or in the presence of potassium hydroxide in dimethyl sulfoxide, or with an alkylating agent in a suitable solvent, preferably with a diazo compound in diethyl ether, or with an aryl or heteroaryl compound in the presence of diethylazo dicarboxylate and triphenylphosphine,

β) in order to introduce a halogen, a compound from one of steps a) -d) is reacted with a halogenating agent in a suitable solvent, preferably with $POCl_3$ in dimethylformamide, with PPh_3/Cl_2, with PPh_3/Br_2, with triphenylphosphine/n- chlorosuccinimide or with HCl/ZnC12,

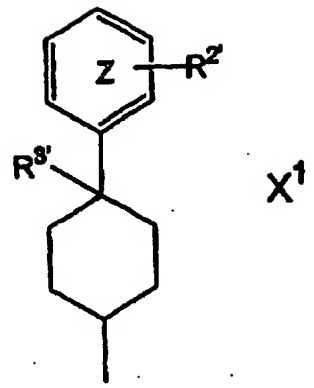
γ) in order to introduce a hydrogen, a compound from step

β) is reacted with hydrogen in the presence of a suitable catalyst, preferably palladium/carbon, in a suitable solvent,

δ) in order to introduce an aliphatic or cycloaliphatic residue or an aryl or heteroaryl group, a compound from step β) is reacted with an aliphatic or cycloaliphatic boronic acid or a boronic acid ester or an aryl or heteroaryl borodihydroxide compound in the presence of palladium(II) acetate and potassium carbonate in a suitable solvent, preferably a dimethylformamide/water mixture, or

ε) in order to introduce an ester group, a compound from one of steps a) -d) is reacted with a carboxylic acid chloride in the presence of a suitable catalyst in a suitable solvent

and then worked up, optionally followed by purification of the compound formed of the formula X^1-R^{IV}, in which X^1 denotes the formula X^1



and R^{IV}, $R^{2'}$ and $R^{3'}$ have the above-stated meaning,

I) a compound of the formula X-R^{IV}, in which X has the above-stated meaning and R^{IV} denotes a functional group, is optionally derivatised in that

a) a ketone of the formula X=0 is reacted 1) with methoxymethyl triphenylphophinium chloride under protective gas in a suitable solvent, preferably in dimethylformamide, in the presence of sodium hydride and then with hydrochloric acid or 2) with $Me_3S{\sim}BF_4$ to yield the corresponding aldehyde X-CHO extended by one carbon atom,

b) an aldehyde of the formula X-CHO according to a) is reacted with a reducing agent,
preferably sodium borohydride, in a suitable solvent, preferably an ethanol/water mixture, to yield the corresponding alcohol X-CH_2-OH,

c) an alcohol C-CH_2-OH according to b) or of the formula X-OH is reacted with a brominating agent, preferably

triphenylphosphine dibromide, in a suitable solvent, preferably acetonitrile, to yield the corresponding bromide of the formula XCH_2-Br or X-Br,

d) a bromide of the formula X-CH_2-Br according to c) is reacted with a phosphifle of the formula PR^V_3, in which R^V denotes an organic residue, preferably a phenyl residue, in a suitable solvent, preferably toluene, ether, tetrahydrofuran or acetone, with cooling and under protective gas to yield the corresponding phosphonium salt $R^V_3P^+$-CHX or

e) a bromide of the formula X-CH_2-Br according to c) is reacted with a phosphite of the formula HP(0) $(OR^{VI})_2$, in which R^{VI} denotes an organiC residue, at elevated temperature, preferably 200°C, to yield the corresponding phosphonate $(R^{VI}O)_2P(0)$-CH_2-X

and then worked up and the product is optionally purified,

J) a compound from step F) or G), in which Y has theabove-stated meaning, is reacted with a compound of the formula X^1-R^{IV} from step H) or a compound X-R^{IV} from step I), in which X, X^1 and R^{IV} have the above-stated meaning, in that

a) a carboxylic acid of the formula Y-COOH is reacted with an amine of the formula X-NH_2 in the presence of a suitable condensing agent, preferably dicyclohexylcarbodiimide, 1-hydroxybenzotriazole and N-methylmorphine,

in a suitable solvent, preferably dimethylformamide, with formation of an amide bridge,

b) a carboxylic acid of the formula Y-COOH is reacted with an alcohol of the formula X-OH in the presence of a suitable condensing agent in a suitable solvent with formation of an ester bridge, the reaction preferably taking place in the presence of methylimidazole and 1-(mesitylene-2'-sulfonyl)-3-nitro-1,2,4-triazole in tetrahydrofuran or in the presence of dicyclohexylcarbodiimide, 1-hydroxybenzotriazole and N-methylmorphine in dimethylformide,

c) a bromide of the formula Y-CH_2-Br is reacted with a compound of the formula X-$CO(CH_2)_p$- OH, in which p has the above-stated meaning, under protective gas in the presence of a suitable catalyst, preferably sodium hydride or potassium tert-butylate, in a suitable solvent, preferably dimethylformamide, with formation of a bridge of the formula - $CO(CH_2)$p-0-CH_2,

d) an alcohol of the formula Y-CH_2-OH is reacted with a bromide of the formula X-Br under protective gas in the presence of a suitable condensing agent, preferably sodium hydride or potassium tert-butylate, in a suitable solvent, preferably dimethylformamide, with formation of an ether bridge,

e) a bromide of the formula Y-CH_2-Br is reacted with an

alcohol of the formula X-OH under protective gas in the presence of a suitable condensing agent, preferably sodium hydride or potassium tert-butylate, in a suitable solvent, preferably dimethylformamide, with formation of an ether bridge,

f) an aldehyde of the formula Y-CHO is reacted with an amine of the formula $X\text{-}NHR^{1'}$ in the presence of a suitable reducing agent, preferably sodium cyanoborohydride and sodium triacetoxyborohydride, in a suitable solvent, preferably a mixture of tetrahydrofuran and 1,2-dichloroethane, with formation of an amino bridge,

g) an aldehyde of the formula Y-CHO is reacted with a phosphonium salt $R''_3P^+\text{-}CHX^-$, in which R" has the above-stated meaning, under protective gas in the presence of suitable catalysts in a suitable solvent, preferably in the presence of sodium methanolate in a mixture of hexane, diethyl ether and/or diisopropyl ether or in the presence of sodium hydride, potassium tert-butylate or a lithium amide in dimethylformamide or dimethyl sulfoxide, with formation of a -CH=CH- bridge or

h) an aldehyde of the formula Y-CHO is reacted with a phosphonate of the formula $(R''O)_2P(O)\text{-}CH_2\text{-}X$, in which R"' has the above-stated meaning, under protective gas in the presence of suitable catalysts, preferably sodium methanolate, sodium hydroxide, potassium hydroxide, sodium hydride, potassium tert-butylate or a lithium amide, in a suitable solvent, preferably dimethylformamide, dimethyl sulfoxide, diethyl ether,

tetrahydrofuran, with formation of a -CH=CH- bridge and

i) optionally the -CH=CH- bridge from step g) or h) is hydrogenated by hydrogen, preferably at standard pressure or elevated pressure of up to 100 bar, in the presence of suitable catalysts, preferably transition metals or transition metal compounds, preferably palladium or the salts thereof, rhodium or the complexes thereof, in a suitable solvent, preferably dimethylformamide, methanol or ethanol, at a temperature of between 20 and 100°C with formation of a $-CH_2-CH_2$ bridge and then worked up and the product is optionally purified,

K) optionally the double bond in the 7-membered ring of one of the reaction products from step I) is hydrogenated by hydrogen, preferably at standard pressure or elevated pressure of up to 100 bar, in the presence of suitable catalysts, preferably transition metals or transition metal compounds, preferably palladium or the salts thereof, rhodium or the complexes thereof, in a suitable solvent, preferably dimethylformamide, methanol or ethanol, at a temperature of between 20 and 100°C and then worked up and the product is optionally purified.

12. (Currently Amended) A pharmaceutical preparation containing at least one substituted benzo[b]azepin-2-one compound or a corresponding tautomer, optionally in the form of the racemate thereof, the pure stereoisomer thereof, in

particular enantiomer or diastereomer, or in the form of mixtures of the stereoisomers, in particular the enantiomers or diastereomers, in any desired mixing ratio or in each case in the form of the acid or base thereof or in the form of the salt thereof, in particular a physiologically acceptable salt, or in each case in the form of the solvate thereof, in particular the hydrate, according to ~~one of claims 1 10~~ claim 1, and optionally physiologically acceptable auxiliary substances.

13. (Original) A pharmaceutical preparation according to claim 12 for combatting pain.

14. (Original) A pharmaceutical preparation according to claim 13 for combatting chronic pain.

15. (Original) A pharmaceutical preparation according to claim 13 for combatting neuropathic pain.

16. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of neurodegenerative diseases, preferably of Alzheimer's disease, Parkinson's disease or Huntington's chorea.

17. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of stroke.

18. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of cerebral ischaemia.

19. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of cerebral infarct.

20. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of cerebral oedema.

21. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of insufficiency states of the central nervous system, preferably hypoxia or anoxia.

22. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of epilepsy.

23. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of schizophrenia.

24. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of psychoses brought about by elevated amino acid levels.

25. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of AIDS dementia.

26. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of Tourette's syndrome.

27. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of encephalomyelitis.

28. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of perinatal asphyxia.

29. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of tinnitus.

30. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of migraine.

31. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of inflammatory and/or allergic reactions.

32. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of depression.

33. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of mental health conditions.

34. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of urinary incontinence.

35. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of pruritus.

36. (Original) A pharmaceutical preparation according to claim 12 for the treatment or prevention of diarrhoea.

37. (Original) A pharmaceutical preparation according to claim 12 for anxiolysis.

39. (Currently Amended) Use of at least one substituted benzo[b]azepin-2-one compound or a tautomer thereof, optionally in the form of the racemate thereof, the pure stereoisomer thereof, in particular enantiomer or diastereomer, or in the form of mixtures of the stereoisomers, in particular the enantiomers or diastereomers, in any desired mixing ratio or in each case in the form of the acid or base thereof or in the form of the salt thereof, in particular a physiologically acceptable salt, or in each case in the form of the solvate thereof, in particular the hydrate, according to ~~one of claims 1-10~~ claim 1 for the production of a pharmaceutical preparation for the combatting of pain, preferably of chronic or neuropathic pain.

40. (Currently Amended) Use of at least one substituted benzo[b]azepin-2-one compound or a tautomer thereof, optionally in the form of the racemate thereof, the pure stereoisomer thereof, in particular enantiomer or diastereomer, or in the form of mixtures of the stereoisomers, in particular the enantiomers or diastereomers, in any desired mixing ratio or in each case in the form of the acid or base thereof or in the form of the salt thereof, in particular a physiologically acceptable salt, or in each case in the form of the solvate thereof, in particular the hydrate, according to ~~one of claims 1-10~~ claim 1 for the production of a pharmaceutical preparation for the treatment or prevention of neurodegenerative diseases, preferably Alzheimer's disease, Parkinson'S disease or Huntington's chorea, for the treatment or prevention of stroke, cerebral ischaemia, cerebral infarct, cerebral oedema, insufficiency states of the central nervous

neurodegenerative diseases, preferably Alzheimer's disease, Parkinson'S disease or Huntington's chorea, for the treatment or prevention of stroke, cerebral ischaemia, cerebral infarct, cerebral oedema, insufficiency states of the central nervous system, preferably hypoxia or anoxia, epilepsy, schizophrenia, psychoses brought about by elevated amino acid levels, AIDS dementia, encephalomyelitis, Tourette's syndrome, perinatal asphyxia, tinnitus, migraine, inflammatory and/or allergic reactions, depression mental health conditions, urinary incontinence, pruritus or diarrhoea or for anxiolysis or anaesthesia.